



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/718,743

11/21/2003

Matias Duarte

4676P045

1792

7590 05/15/2008  
Thomas C. Webster  
Blakely, Sokoloff, Taylor & Zafman LLP  
1279 Oakmead Parkway  
Sunnyvale, CA 94085

EXAMINER

SHINGLES, KRISTIE D

ART UNIT

PAPER NUMBER

2141

MAIL DATE

DELIVERY MODE

05/15/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/718,743	<b>Applicant(s)</b> DUARTE ET AL.	
	<b>Examiner</b> KRISTIE D. SHINGLES	<b>Art Unit</b> 2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-9 and 23-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-9 and 23-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/10/08</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### **Per Applicant's Request for Continued Examination**

Claim 1 has been amended.

Claims 2, 3, 10-22 and 29-40 have been canceled.

Claims 1, 4-9 and 23-28 are pending.

### **Continued Examination Under 37 CFR 1.114**

**I.** A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/10/2008 has been entered.

### **Response to Arguments**

**II.** Applicant's arguments with respect to claims 1 and 23 have been considered but are moot in view of the new ground(s) of rejection.

### **CLAIM REJECTIONS - 35 USC § 102**

**III.** The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2144

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**IV. Claims 23 - 28 are rejected under 35 U.S.C. 102(e) as being anticipated by *Enger et al* (US 2005/0020325).**

a. **Per claim 23**, *Enger et al* teach a data processing device having a first operational mode and a second operational mode comprising:

- a display for displaying text and graphics (*page 2 paragraphs 0016-0017 and 0020, page 3 paragraph 0031, page 5 paragraphs 0044-0047*);
- a first group of control elements to perform a first plurality of defined functions within a first physical orientation and to perform a second plurality of defined function with a second physical orientation (*Figures 1 and 2, page 5 paragraphs 0042-0046, page 6 paragraph 0053—altering the functionality of the control elements inputs by switching from a numeric keypad in telephone mode of the portrait orientation to the QWERTY text keypad in PDA mode of the landscape orientation*), wherein the first physical orientation comprises the data processing device and the display rotated substantially 90 degrees in relation to the second physical orientation (*page 2 paragraph 0021 and 0023, page 3 paragraph 0029—provisions for rotating the device substantially 90 degrees*); and
- a motion sensor to detect the orientation of the data processing device, wherein the data processing device automatically switches from the first operational mode to the second operational mode in response to the motion sensor detecting the data processing device switching from the first physical orientation to the second physical orientation (*page 2 paragraphs 0017-0018, page 3 paragraphs 0028-0031, pages 4-5 paragraphs 0041-0042, 0050-0051—provisions for motion sensing to automatically detect the orientation of the device in order to activate the mode's associated applications*) and wherein text and graphics are rotated 90 degrees as the display is rotated from the first physical orientation to the second physical orientation (*pages 4-5 paragraphs 0041-0047, page 6 paragraph 0053*).

b. **Per claim 24**, *Enger et al* teach the data processing device as in claim 23, further comprising: a display render having a first image orientation associated with the first operational mode and to render images having a second image orientation associated with the

Art Unit: 2144

second operational mode (*Abstract, page 1 paragraphs 0008-0009, page 2 paragraph 0018, pages 3-4 paragraphs 0031-0032, page 5 paragraphs 0044-0046*).

c. **Per claim 25**, *Enger et al* teach the data processing device as in claim 24, wherein the first image orientation is rotated plus or minus 90 degrees with respect to the second image orientation (*page 2 paragraph 0021*).

d. **Claim 26** is substantially similar to claim 25 and is therefore rejected under the same basis.

e. **Per claim 27**, *Enger et al* teach the data processing device in claim 1, wherein the group of control elements include a first group of glyphs representing the first plurality of defined functions and a second group of glyphs representing the second plurality of defined functions (*Figures 1 and 2, page paragraph 0017, page 5 paragraphs 0042-0046, page 6 paragraph 0053*).

f. **Per claim 28**, *Enger et al* teach the data processing device as in claim 27 wherein the data processing device highlights the first group of glyphs when in the data entry mode and highlights the second group of glyphs when in the telephony mode (*Figures 1 and 2*).

### CLAIM REJECTIONS - 35 USC § 103

V. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**VI. Claims 1 and 4 - 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Finke-Anlauff* (US 6,850,226) in view of *Saarin* (US 6,882,335) and *Ostergard et al* (US 6,803,903).**

a. **Per claim 1**, *Finke-Anlauff* teaches a data processing device having a first operational mode and a second operational mode, the data processing device comprising:

- a plurality of control elements to perform a first plurality of defined functions when the data processing device is in the first operational mode and to perform a second plurality of defined function when the data processing device is in the second operational mode, wherein (*Figures 1-7, col.1 line 38-col.2 line 3, col.3 line 41-col.4 line 36—provision for control elements that perform specific functions in a telephone mode, PDA mode and camera mode*),
- the first operational mode is associated with a first physical orientation of the data processing device and the plurality of control elements and the second operational mode is associated with a second physical orientation of the data processing device and the plurality of control elements (*Figures 1-7, col.1 line 38-col.2 line 3, col.3 line 41-col.4 line 36—the telephone mode is associated with one sliding orientation of the display screen and the PDA mode is associated with a different sliding orientation of the display screen*).
- wherein the images generated by the data processing device include menus and/or user interface elements, and wherein functions performed by the menus and/or user interface elements are modified to reflect switching between the first operational mode and the second operational mode (*col.1 line 40-col.2 line 3, col.3 lines 27-41, col.4 lines 22-36*).

*Finke-Anlauff* further teaches an actuation switch that triggers the applications associated with each screen orientation (*col.4 lines 23-37*), yet fails to explicitly teach wherein at least one of the plurality of control elements includes: a first plurality of glyphs on a corresponding plurality of physical keys of an alphanumeric keyboard, each of the first plurality of glyphs representing a designated one of the first specified functions, the first plurality of glyphs being highlighted when the data processing device is in the first operational mode and a second plurality of glyphs on the plurality of physical keys of the alphanumeric keyboard, each of the second plurality of glyphs representing a designated one of the second specified functions,

Art Unit: 2144

the second plurality of glyphs being highlighted when the data processing device is in the second operational mode, wherein the data processing device automatically highlights the first plurality of glyphs when in the operational mode and automatically highlights the second plurality of glyphs when in the second operational mode wherein at least one of the first and second plurality of glyphs is highlighted when illuminated from an optical source. However, *Saarinen* teaches a graphic symbol or icon associated with the operational mode and orientation of the device, wherein the symbol/icon is activated and displayed in response to the portrait/landscape switching signal corresponding to the portrait/landscape mode of the device (*col.5 lines 13-38, col.9 lines 34-47, col.9 line 60-col.10 line 15, col.16 lines 5-40*).

*Saarinen* further teaches that the particular symbols on the keyboard are activated using an infrared beam matrix when the display is configured in the landscape or portrait mode (*col.15 line 65-col.16 line 12*). Nonetheless, *Ostergard et al* explicitly teach the highlighting of a first and second plurality of glyphs, illuminated from an optical source such as a light-emitting source powered by electrodes on the device (*Figures 6a and 6b, col.5 lines 14-53, col.5 line 58-col.6 line 2, col.6 lines 30-54*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Finke-Anlauff* with *Saarinen* and *Ostergard et al* for the purpose of providing mode glyphs/indicators associated with the respective orientation and operating mode of the device and illuminated by optical sources resident on the device; because this provides a illumination for displaying to the user a mode identification means by visually informing the user (via a symbol/icon/glyph/graphic) of the device's present operating mode and indicating the respective key functions associated with each operating mode.

b. **Per claim 4**, *Finke-Anlauff* with *Saarinen* and *Ostergard et al* teach the data processing device in claim 1, *Saarinen* further teaches wherein each of the first glyphs are positioned on each of the control elements in a first orientation corresponding to the first orientation of the data processing device and each of the second glyphs are positioned on each of the control elements in a second orientation corresponding to the second orientation of the data processing device (*col.16 lines 5-29, col.5 lines 13-38; Ostergard et al—Figures 6a and 6b, col.6 lines 30-54*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Finke-Anlauff* with *Saarinen* and *Ostergard et al* to provide glyphs on control elements since the control elements are multifunctional and have different functions depending on the orientation of the device and depending on the applications that are activated.

d. **Per claim 5**, *Finke-Anlauff* with *Saarinen* and *Ostergard et al* teach the data processing device as in claim 4, *Finke-Anlauff* further teaches wherein the first orientation is rotated 90 degrees relative to the second orientation (*Figures 1-7, col.2 line 58-col.3 line 12, col.3 lines 27-34; Saarinen—Figures 2-4, col.8 lines 51-53*).

e. **Per claim 6**, *Finke-Anlauff* with *Saarinen* and *Ostergard et al* teach the data processing device as in claim 1, *Finke-Anlauff* further teaches wherein the first operational mode comprise: a data entry mode and wherein the second operational mode comprises a telephony mode wherein the data processing device performs telephony-based functions (*Figures 1-7, col.1 line 38-col.2 line 3, col.2 line 36-47; Saarinen—col.10 lines 34-58; Ostergard et al—Figures 6a and 6b, col.6 lines 30-54*).



f. **Per claim 7**, *Finke-Anlauff* with *Saarinen* and *Ostergard et al* teach the data processing device as in claim 6, *Finke-Anlauff* further teaches wherein when in the telephony mode, the second specified function for a group of the control elements is that of a numeric keyboard for entering telephone numbers (*Figure 1, col.1 lines 59-63, col.3 lines 54-60; Saarinen—col.10 lines 49-51; Ostergard et al—Figures 6a and 6b, col.6 lines 30-54*).

g. **Per claim 8**, *Finke-Anlauff* with *Saarinen* and *Ostergard et al* teach the data processing device as in claim 7, *Finke-Anlauff* further teaches wherein, when in the data entry mode, the first specified function for a group of the control elements is that of a cursor control keypad (*Figures 3-4, col.1 lines 38-58, col.2 lines 36-57; Saarinen—col.10 lines 52-55; Ostergard et al—Figures 6a and 6b, col.6 lines 30-54*).

**VII. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Finke-Anlauff* (US 6,850,226) in view of *Saarinen* (US 6,882,335) and *Ostergard et al* (US 6,803,903) in further view of *Enger et al* (US 2005/0020325).**

**Per claim 9**, *Finke-Anlauff* with *Saarinen* and *Ostergard et al* teach the data processing device as in claim 1 as applied above. *Finke-Anlauff* with *Saarinen* and *Ostergard et al* all teach control elements including keyboard/keypad input comprising buttons, yet fail to explicitly teach wherein the plurality of control elements includes a control wheel for moving a graphical cursor element when rotated in either the first operational mode and/or the second operational mode. However, *Enger et al* teaches various input types including a trackball, joystick, and/or rotating dials for use in the different operational modes of the device (*page 5-6 paragraph 0052*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Finke-Anlauff*, *Saarinen* and *Ostergard et al* with *Enger et al* in order

to provide additional control elements for input in order to give the user better control and ease when using the device.

### **Conclusion**

**VIII.** The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure: Shipman (6918677), Hull et al (6720863), Schuberth et al (6667446), Duarte (6608271), Daigle et al (5576706), Baker et al (5920303).

**Examiner's Note:** Examiner has cited particular columns and line numbers in the reference(s) applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the Applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the cited passages as taught by the prior art or relied upon by the examiner. Should Applicant amend the claims of the claimed invention, it is respectfully requested that Applicant clearly indicate the portion(s) of Applicant's specification that support the amended claim language for ascertaining the metes and bounds of Applicant's claimed invention.

**IX.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to KRISTIE D. SHINGLES whose telephone number is (571)272-3888. The examiner can normally be reached on Monday 8:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

***Kristie D. Shingles***  
***Examiner***  
***Art Unit 2141***

***kds***

/William C. Vaughn, Jr./

Supervisory Patent Examiner, Art Unit 2144